

DOCUMENT-IDENTIFIER: US 6329139 B1

TITLE: Automated sorting system for matrices with memory

DEPR:

If needed, segregation of the binding and information surfaces can be achieved by coating portions of the OMD with films formed from a dielectric material such as polyethylene, MYLAR, TEFLON.RTM., KAPTON, polycarbonate, or, preferably, the para-xylylene polymers sold under the trade name Parylene [see, e.g., U.S. Pat. Nos. 3,288,728, 3,342,754 and 3,429,739], or any other such materials that are commonly used in the electronics industry to passivate electronic components and circuit boards, and as a coating for medical devices, especially implants, catheters, probes and needles. [Parylene is the trade name for members of a series of polymers which are commercially available from

Specialty Coating Systems, Inc., of Indianapolis, Ind. and originally from Union Carbide Corporation, Greenville, S.C., see, U.S. Pat. Nos. 3,288,728, 3,342,754 and Gorham 3,429,739; see, also brochures distributed by the manufacturer, entitled "Parylene Conformal Coatings Specifications and Properties" (.COPYRGT. 1984, Specialty Coating Systems, Inc.), and "Parylene,

A Biostable Coating for Medical Applications" (.COPYRGT. 1984, Specialty Coating Systems, Inc.). These polymers provide a conformal biostable coating which electrically and chemically isolates the protected surface from its environment.

DEPR:

The Parylene or other such polymeric coating can be treated to form a chemically functional substrate by methods such as beta or gamma radiation, and mechanical or chemical roughening. Alternatively, polystyrene microspheres can be bonded [glued or welded] to selected surface(s) of the OMD, either on the Parylene or similar coating, or directly to the ceramic or polypropylene.

DEPR:

Referring now to FIG. 38, a vial is shown in perspective and generally designated 3010. Vial 3010 has three portions: a lid 3076, a cylinder 3028,

and a sleeve. The vial is shown in cross-section in FIG. 39. As shown, the lid 3076 is held on the cylinder 3028 by threads 3089 that are formed on the cylinder and the lid. Although threads provide for an easy installation and removal of the lid, a snap-type attachment could also be used. Moreover, any type of lid could be used and it would not affect the utility of this system 3000. It will be appreciated by those skilled in the art that the ability to add and remove materials from the cylinder is determined by the type of lid that is used. This preferred embodiment uses a lid 3076 that is formed with a membrane window 3078 that is preferably made of a puncturable material. This puncturable material would allow a syringe to puncture the membrane to inject or remove materials from the cylinder, removing the syringe when finished, allowing the membrane to re-seal itself. Such materials are well known in the art and are not discussed further here.

#### DEPR:

Referring now to FIG. 97, a manual cleaving station is shown and generally designated 9700. Manual cleaving station 9700 includes a cleaving block 9702 formed with an array of bores 9704 and having a number of standoffs 9706 and sleeves 9708. Manual cleaving station 9700 also includes a top plate, or tray, 9710 which is formed with four mounting holes 9712 aligned with the standoff pegs 9706, and an array of holes 9714 aligned with bores 9704. As shown, microreactor carrier, such as a syringe body or similar funnel-ended cylindrical tube 9716 and 9718 are removably inserted into holes 9714.

#### DEPR:

Vacuum chamber 10142 is typically made from glass, which provides the ability to visually verify the proper cleaving process is completed, as well as resist corrosion from such materials as TFA. In addition to a vacuum chamber 10632, a vacuum generator (not shown) may include a vacuum trap to eliminate the destructive effect of TFA on the vacuum generator itself. Such a vacuum trap is generally known in the art as a standard bench chemist's trap, or "cold trap".